



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,193	08/21/2006	Minoru Itoh	01150-1003	1053
30671 7590 05/20/2009 DITTHAVONG MORI & STEINER, P.C. 918 Prince St. Alexandria, VA 22314				
EXAMINER TURNER, ARCHENE A				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
05/20/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/598,193

Applicant(s)

ITO ET AL.

Examiner

ARCHENE TURNER

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 8&11/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palmqvist et al (6,333,100) or Lindskog et al (6,299,992) in view of Ishii et al (5,972,495) or Ljungberg (5,851,687).

Palmqvist et al or Lindskog et al disclose the claimed substrate having the claimed composition and WC grain size with a multilayered coating including alumina thereon. It is the examiner's position that the claimed roughness is considered inherent to the substrates of Palmqvist or Lindskog et al, since they are honed to produce curvature. They do not explicitly disclose the claimed grain size within the alumina coating.

Ishii et al or Ljungberg disclose that alpha alumina layers for tool can have the claimed grain size.

Thus it would have been obvious to one of ordinary skill in the art to provide the alumina layers of Palmqvist et al or Lindskog et al with the claimed grain size as these values are known to be available for alpha alumina layers, as shown by Ishii et al or Ljungberg.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Palmqvist et al (6,333,100) or Lindskog et al (6,299,992) in view of Ishii et al (5,972,495) or Ljungberg (5,851,687) and in further view of Moriguchi et al (5,597,272) or Kyocera (JP 05-057507) or Sumitomo (JP 2003-094230).

Palmqvist et al or Lindskog et al in view of Ishii et al or Ljungberg disclose the invention substantially as claimed except for the addition of TiN and the removal thereof.

Moriguchi et al or Kyocera or Sumitomo disclose the known technique of adding TiN on multilayered coating for tools then removing the TiN thereof.

Thus it would have been obvious to one of ordinary skill in the art to adding TiN on multilayered coating for tools then removing the TiN thereof to Palmqvist et al or Lindskog et al in view of Ishii et al or Ljungberg, as this technique is known in the art to improve performance of coated tools, as shown by Moriguchi et al or Kyocera or Sumitomo.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Archene Turner whose new telephone number is (571) 272-1545. The examiner can normally be reached on Monday, Wednesday through Friday from 10:30 am. to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1794

Please remember to include on the fax, the art unit 1775, serial number and Examiner's name.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**/A. A. Turner/
Primary Examiner
Group 1700**

aat